



## **Chemical/Biological Terrorism November 2004**

1: Am J Health Syst Pharm. 2004 Jul 15;61(14):1420, 1422, 1424.

Funding cuts could expose states to terrorist attacks.

Young D.

Publication Types: News

PMID: 15332682 [PubMed - indexed for MEDLINE]

2: Am J Health Syst Pharm. 2004 Jun 1;61(11):1167-75.

Comment on:

Am J Health Syst Pharm. 2002 Jun 15;59(12):1189-92.

Am J Health Syst Pharm. 2002 Jun 15;59(12):1193-9.

J Am Pharm Assoc (Wash). 2001 Nov-Dec;41(6):834-7.

Bioterrorism preparedness and response: emerging role for health-system pharmacists.

Setlak P.

Chicago College of Pharmacy, Downers Grove, IL, USA.

Paul.Setlak@mwumail.midwestern.edu

Publication Types: Comment

PMID: 15237570 [PubMed - indexed for MEDLINE]

3: Am J Law Med. 2004;30(2-3):217-36.

Environment and public health in a time of plague.

Sutton V.

Environmental Sciences, University of Texas at Dallas, USA.

PMID: 15382753 [PubMed - indexed for MEDLINE]

4: Anesthesiol Clin North America. 2004 Sep;22(3):591-606, viii-ix.

A therapeutic strategy against the shared virulence mechanism utilized by both *Yersinia pestis* and *Pseudomonas aeruginosa*.

Sawa T, Wiener-Kronish JP.

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*Yersinia pestis*, which causes pneumonic plague in healthy individuals, has the potential to be used for biologic warfare. *Pseudomonas aeruginosa* is an opportunistic pathogen that causes severe pneumonia in immunocompromised patients. There is evidence that these two pathogens use a highly homologous virulence mechanism, the type III secretion system. The type III secretion systems of both *Yersinia* and *P. aeruginosa* possess a protein named V-antigen

which can be used as a target for immunotherapy against bioterrorism and opportunistic infections. This article summarizes the recent progress of V-antigen studies in *Yersinia* and *P. aeruginosa*.

Publication Types: Review Review, Multicase

PMID: 15325721 [PubMed - indexed for MEDLINE]

5: Anesthesiol Clin North America. 2004 Sep;22(3):579-90, viii.

Cholinergic symptoms due to nerve agent attack: a strategy for management.  
Schechter WP.

San Francisco General Hospital, Department of Surgery, Room 3A, Box 0807, 1001 Potero Avenue, San Francisco, CA 94110, USA. bschecht@sfghsurg.ucsf.edu

This article provides a brief history of nerve agent development and use and discusses the pharmacology, symptoms, signs, and treatment of nerve agent exposure. In addition, this article discusses the challenges of mass-casualty triage, decontamination, resuscitation, and intensive care.

Publication Types: Review Review, Tutorial  
PMID: 15325720 [PubMed - indexed for MEDLINE]

6: Anesthesiol Clin North America. 2004 Sep;22(3):563-77, viii.

Bioterrorism and children: unique concerns with infection control and vaccination.

Leissner KB, Holzman RS, McCann ME.

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Treatment of child victims of a bioterrorism attack is complicated because they may be more vulnerable to the agents used and may suffer more complications from the treatment strategies. Isolation and other infection control measures can be psychologically harmful to young children and may require that they undergo sedation. Most of the recommended antibiotics and antiviral treatments for bioterror agents have not been approved for use in children, and children

undergoing smallpox vaccination have a higher incidence of complications than adults.

Pediatric anesthesiologists should expect to be part of the pediatric care team and must be careful to observe infection control procedures to limit the spread of disease caused by bioterror attack.

Publication Types: Review Review, Tutorial  
PMID: 15325719 [PubMed - indexed for MEDLINE]

7: Anesthesiol Clin North America. 2004 Sep;22(3):509-32, vii.

Medical aspects of biologic toxins.

Marks JD.

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Biologic toxins are molecules produced by living organisms that are poisonous to other species, such as humans. Some biologic toxins are so potent and relatively easy to produce that they have been classified as biothreat agents. These include the botulinum neurotoxins, ricin, staphylococcal enterotoxin B, and Clostridium perfringens epsilon toxin. This article focuses on these four biothreat toxins and their medical aspects. The majority of the article is spent on the botulinum neurotoxins, because these are the most poisonous substances known and are the only toxins classified as Category A threat agents-the highest level of threat agent. The remainder of the article is devoted to sections on the other three biothreat toxins: ricin, staphylococcal enterotoxin B, and C perfringens epsilon toxin.

Publication Types: Review Review, Tutorial  
PMID: 15325716 [PubMed - indexed for MEDLINE]

8: Ann Emerg Med. 2004 Jul;44(1):84-5.

Waiting for Saddam.

Amir L.

Publication Types: Editorial  
PMID: 15226716 [PubMed - indexed for MEDLINE]

9: BMJ. 2004 Oct 30;329(7473):993.

BMA says scientists should take part in bioterrorism debate.

Eaton L.

Publication Types: News  
PMID: 15514322 [PubMed - in process]

10: BMJ. 2004 Oct 23;329(7472):977; author reply 977.

Comment on: BMJ. 2004 Sep 4;329(7465):524-5.

Bioterrorism and compulsory vaccination: United States continues vaccinating to keep troops healthy.

Grabenstein JD, Winkenwerder W Jr.

Publication Types: Comment Letter

PMID: 15499123 [PubMed - indexed for MEDLINE]

11: BMJ. 2004 Oct 23;329(7472):977-8.

Comment on: BMJ. 2004 Sep 4;329(7465):524-5.

Bioterrorism and compulsory vaccination: arguments for current vaccines are based on inadequate support for older vaccines.

Schumm WR.

Publication Types: Comment Letter

PMID: 15499122 [PubMed - indexed for MEDLINE]

12: Clin Med. 2004 May-Jun;4(3):289; author reply 289.

Comment on: Clin Med. 2004 Mar-Apr;4(2):161-4.

Bioterrorism: the need to be prepared.

Holdstock D.

Publication Types: Comment Letter

PMID: 15244370 [PubMed - indexed for MEDLINE]

13: Clin Med. 2004 May-Jun;4(3):258-61.

The story of Clostridium botulinum: from food poisoning to Botox.

Ting PT, Freiman A.

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In the last fifty years, Clostridium botulinum has become notorious for its ability to produce the deadly botulinum neurotoxins. While botulinum toxin A, better known as Botox, is universally recognised by the public as a cosmetic enhancement tool, the botulinum neurotoxins are commonly used off-label for many medical conditions in ophthalmology, neurology and dermatology. The versatility of these botulinum toxins has made Clostridium botulinum one of the most widely known bacterial pathogens in medical history. This article outlines the discovery of botulinum toxins through to their present day applications in medicine.

Publication Types: Historical Article Review Review, Tutorial

PMID: 15244362 [PubMed - indexed for MEDLINE]

14: Curr Biol. 2004 Nov 9;14(21):R905-6.

Keeping up with bioterrorism fears.

Gross M.

The threat of bioterrorism does not diminish and two major UK research bodies recently backed a meeting to give scientists a voice in the political discussion over possible misuse of advanced biotechnology research. Michael Gross reports.

PMID: 15530373 [PubMed - in process]

15: Diagn Microbiol Infect Dis. 2004 Aug;49(4):295-7.

Non-O1 Vibrio cholerae septicemia: case report, discussion of literature, and relevance to bioterrorism.

Anderson AM, Varkey JB, Petti CA, Liddle RA, Frothingham R, Woods CW.

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Non-O1 Vibrio cholerae (NOVC) is a rare cause of septicemia in the United States. We report a case of NOVC septicemia and discuss the literature pertaining to this organism. NOVC takes on new significance given that it can be confused with toxigenic V. cholerae, a Centers for Disease Control and Prevention category B bioterrorism agent.

Publication Types: Case Reports

PMID: 15313536 [PubMed - indexed for MEDLINE]

16: Disaster Manag Response. 2004 Jul-Sep;2(3):75-80.

Planning for hospital emergency mass-casualty decontamination by the US Department of Veterans Affairs.

Brown M, Beatty J, O'keefe S, Bierenbaum A, Scott M, Hodgson M, Wear J.

Environmental Agents Service, US Department of Veterans Affairs, Washington, DC

20420, USA. mbrown1@hq.med.va.gov

PMID: 15286597 [PubMed - indexed for MEDLINE]

17: Disaster Manag Response. 2004 Jul-Sep;2(3):69-74.

Physician preparedness for bioterrorism recognition and response: a Utah-based needs assessment.

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The medical community accepts that they have a need to be prepared to recognize and respond to bioterrorism events. A needs assessment conducted among physicians throughout the state of Utah provided insights into their perceived training needs and preferred methods of learning. Physicians have many competing demands on their time and tailored educational offering can increase the intended audience's acceptance and learning.

PMID: 15286596 [PubMed - indexed for MEDLINE]

18: Electrophoresis. 2004 Mar;25(6):897-902.

Separation of thiol and cyanide hydrolysis products of chemical warfare agents by capillary electrophoresis.

Copper CL, Collins GE.

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Overlook Avenue SW, Washington, DC 20375-5342, USA.

The fluorescence derivatizing agent, o-phthalaldehyde (OPA), has been applied to the separation and detection of cyanide and several structurally similar thiols by capillary electrophoresis (CE)-laser induced fluorescence (LIF). Of particular interest to this investigation was the separation of

2-dimethylaminoethanethiol, 2-diethylaminoethanethiol, and cyanide, each of which are hydrolysis products or hydrolysis product simulants of the chemical warfare (CW) agents O-ethyl S-2-diisopropylaminoethyl methylphosphonothiolate (VX), O-isobutyl S-2-diethylaminoethyl methylphosphonothiolate (R-VX), and tabun (GA). Other structurally similar thiols simultaneously resolved by this method include 1-pentanethiol and 2-mercaptoethanol. Instrumental parameters were probed and optimum values for capillary length (50 cm) and inner diameter (75 microm), injection time (30 s) and field strength (15 kV) were determined. Sample stacking methods enabled detection limits of 9.3 microg/L for cyanide, 1.8 microg/L for 2-diethylaminoethanethiol, 35 microg/L for 2-dimethylaminoethanethiol, 15 microg/L for 2-mercaptoethanol, and 89 microg/L

for 1-pentanethiol. The linearity of the method was verified over an order of magnitude and the reproducibility was found to be 3.0%.

PMID: 15004852 [PubMed - indexed for MEDLINE]

19: Expert Rev Vaccines. 2004 Oct;3(5):493-5.

Bioterrorism: what level is the threat and are vaccines the answer?

Smith LA.

Department of Immunology and Molecular Biology, Division of Toxinology, United States Army Medical Research Institute of Infectious Diseases, 1425 Porter Street, Fort Detrick, MD 21702-5011, USA. leonard.smith@det.amedd.army.mil.

Publication Types: Editorial

PMID: 15485326 [PubMed - in process]

20: Fla Law Rev. 2003 Dec;55(5):1171-90.

Comment on: Fla Law Rev. 2003 Dec;55(5):1105-70.

Puppy love: bioterrorism, civil rights, and public health.

Annas GJ.

Health Law Department, Boston University School of Public Health, USA.

Publication Types: Comment

PMID: 15478248 [PubMed - indexed for MEDLINE]

21: J Biolaw Bus. 2004;7(2):40-53.

A look behind the scenes: bioterrorism, smallpox, and public health policy.

Beane J.

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The September 11, 2001 terrorist attacks on the World Trade Center and continued conflict in Middle Eastern countries has provoked a strong interest in issues of national security. On December 13, 2002 the Bush Administration announced its smallpox vaccination policy, the first nationwide "proactive" measure to address the threat of bioterrorism. The Program has received mixed reactions as a result of partisan issues, tensions in public health policy and federal and state jurisdiction, conflicting scientific views, and different risk assessments. The slow pace of the program, the difficulties surrounding its implementation, and the debates regarding its validity serves as a "case study" to demonstrate current short-comings in federal and state anti-terrorist and public health policies. The focus will be on the states' public health laws and emergency

preparedness plans through an analysis of the proposed Model State Emergency Preparedness Act. Updating current public health laws combined with increased funding of scientific research and the foresight to act "proactively" will reach far beyond improving national security. These efforts serve the dual purpose of deterring future terrorist attacks while greatly improving responses to a number of other health emergencies and disasters.

PMID: 15460560 [PubMed - indexed for MEDLINE]

22: J Biolaw Bus. 2004;7(2):27-39.

The First Amendment and scientific freedom in the era of bioterrorism.

Anton BP.

Boston University, USA.

The events of 9/11 have raised awareness that certain scientific research in the public domain may aid terrorists in their quest to develop biological weapons, and there is a legitimate cause for concern in rare cases. Proposed executive branch responses are consistent in their approach to the problem: restrain the offending research by restricting public access to it in some form or another. This paper examines some of the history of the United States (U.S.) government's

restrictions on scientific communication and the protection that the First Amendment affords scientists against such restrictions. It focuses in particular on biological science, which has in recent years come under increased scrutiny due to fears of "bioterrorism." It concludes that science needs to be vigilant against government encroachment, but also needs to become the first line of defense in preventing dissemination of potentially dangerous research data.

Should the exercise of prior restraint against biological research become necessary, the guidelines developed at the 2002 Monterey workshop provide a useful framework for determining what biological research might cause "direct, immediate, and irreparable" harm to national security under the New York Times Co. v. United States precedent.

PMID: 15460559 [PubMed - indexed for MEDLINE]

23: J Calif Dent Assoc. 2004 Aug;32(8):663-4.

Forensic dentistry: dentistry and bioterrorism.

Spencer DE.

California Society of Forensic Dentistry, Inc., USA.

PMID: 15481232 [PubMed - in process]

24: J Dent Educ. 2004 Nov;68(11):1196-9.

Incorporating Bioterrorism Training into Dental Education: Report of ADA-ADEA Terrorism and Mass Casualty Curriculum Development Workshop.

Chmar JE, Ranney RR, Guay AH, Haden NK, Valachovic RW.

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Numerous areas have been identified in which the dental profession may be called upon to assist in the event of a major terrorism attack. In order to successfully fulfill these roles, dentists and dental students must be adequately prepared. Dental schools play a vital role in this preparation.

Participants in an ADA-ADEA workshop reached consensus that all dental students should be trained in a core set of competencies enabling them to respond to a significant bioterrorism attack, help contain the spread of the attack, and participate in surveillance activities as appropriate upon direction of proper authorities. Further emergency response training should be available to individuals interested in gaining additional knowledge and skills to assist in response to an attack. Participants also concluded that, where possible, training should be seamlessly implemented into the current curriculum without the addition of new courses; however, the group also recognized the possible need for alternative models at some dental schools. Challenges to implementing bioterrorism training into the dental school curriculum include regional variation, management of the basic science curriculum, and financial considerations. The development of an exportable training package will be considered and funding sources explored in moving forward with the development of a curriculum.

PMID: 15520240 [PubMed - in process]

25: J Environ Health. 2004 Sep;67(2):40, 43.

Running the nerve gas gauntlet.

Martel M.

Publication Types: Letter

PMID: 15468515 [PubMed - indexed for MEDLINE]

26: J Infect Dis. 2004 Oct 1;190(7):1228-36. Epub 2004 Aug 30.

Immune responses to Bacillus anthracis protective antigen in patients with bioterrorism-related cutaneous or inhalation anthrax.

Quinn CP, Dull PM, Semenova V, Li H, Crotty S, Taylor TH, Steward-Clark E, Stamey KL, Schmidt DS, Stinson KW, Freeman AE, Elie CM, Martin SK, Greene C, Aubert RD, Glidewell J, Perkins BA, Ahmed R, Stephens DS.

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Anti-protective antigen (PA) immunoglobulin (Ig) G, toxin neutralization, and PA-specific IgG memory B cell responses were studied in patients with bioterrorism-related cutaneous or inhalation anthrax and in a patient with laboratory-acquired cutaneous anthrax. Responses were determined for >1 year after the onset of symptoms. Eleven days after the onset of symptoms (15 days after likely exposure), anti-PA IgG was detected in 16 of 17 patients with confirmed or suspected clinical anthrax who were tested. Anti-PA IgG remained detectable 8-16 months after the onset of symptoms in all 6 survivors of inhalation anthrax and in 7 of 11 survivors of cutaneous anthrax who were tested. Anti-PA IgG levels and serum toxin neutralizing activity were strongly associated ( $R^2=0.83$ ). PA-specific IgG memory B cells were detectable in all 6 survivors of inhalation anthrax but in only 2 of 7 patients with cutaneous anthrax who were tested. Anti-PA IgG is an important diagnostic marker of anthrax, a predictor of serum anti-toxin activity, and a marker of immunological memory against anthrax.

PMID: 15346332 [PubMed - indexed for MEDLINE]

27: J Public Health Manag Pract. 2003 Sep-Oct;9(5):418-26.

Developing the academic institution's role in response to bioterrorism: the Iowa Center for Public Health Preparedness.

Atchison CG, Uden-Holman T, Greene BR, Prybil LD.

The University of Iowa College of Public Health, Iowa City 52242, USA.

The terrorist acts during the fall of 2001 triggered renewed concern about the capacity of the nation's public health system to deal with crisis. A critical element of the response ability of the public health system is a prepared workforce. Based on a pre-existing concern about emerging infectious disease, the Centers for Disease Control (CDC), working with the

Association of Schools of Public Health, had established a network of university-based Centers for Public Health Preparedness. The events of September 11 accelerated, expanded, and focused this effort. This article discusses this national program, details the activities of the based Center for Public Health Preparedness located at the University of Iowa, and suggests preparedness issues deserving future development.

PMID: 15503607 [PubMed - in process]

28: J Public Health Manag Pract. 2003 Sep-Oct;9(5):384-93.

Local collaborations: development and implementation of Boston's bioterrorism surveillance system.

McKenna VB, Gunn JE, Auerbach J, Brinsfield KH, Dyer KS, Barry MA.

Communicable Disease Control Division, Boston Public Health Commission, Massachusetts 02118, USA.

The Boston Public Health Commission developed and implemented an active surveillance system for bioterrorism and other infectious disease emergencies. A bioterrorism Surveillance Task Force was formed with representatives from local emergency medicine, infection control, infectious diseases, public health, and emergency medical services. These local agencies worked together to develop a reliable, easy to use electronic surveillance system.

Collaboration at the local level and building on existing relationships is a key component of this system. Effective follow-up systems and technology back-up plans are essential.

Improved communication networks and increased bioterrorism education for clinicians and the general public have also been achieved.

PMID: 15503603 [PubMed - in process]

29: J Public Health Manag Pract. 2003 Sep-Oct;9(5):352-6.

Public health response to bioterrorism with *Bacillus anthracis*: coordinating public health laboratory, communication, and law enforcement.

Nolan PA, Vanner C, Bandy U, Banner G, Combs WS, Fulton J, Hayes GV, Jones K, Marshall RJ Jr.

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In October 2001, public health departments across the United States were part of an intensive response to a bioterrorism event using anthrax spores delivered by mail. It is useful to examine this experience as an unscripted exercise of bioterrorism response capacity, more realistic than scenarios of planned exercises. The event particularly challenged public health laboratory and

communications capacity, but it also tested surveillance and training capacity. The bioterrorism response demonstrated the importance of strong partnerships between the public health laboratory and emergency response agencies as well as medical providers and the usefulness of open, flexible communication strategies.

PMID: 15503598 [PubMed - in process]

30: Mil Med. 2004 Aug;169(8):654-9.

Applications and challenges of DNA microarray technology in military medical research.

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This review discusses the challenges and applications of DNA microarray technology as it is being used in each of the four major research areas of the U.S. Army Medical Research and Materiel Command: military infectious diseases, combat casualty care, military operational medicine, and medical chemical and biological defense. The overall objective of this review is two-fold. First, the objective is to increase awareness in senior military leadership of the challenges and opportunities presented by DNA microarray technology and the emerging and rapidly changing field of bioinformatics. Second, the aim is to publicize to the civilian research community the additional challenges associated with the use of microarray technology in military medical research. This discussion contains material that would be useful for making programmatic recommendations that team strategic research investments and emerging technologies with U.S. Army Medical Research and Materiel Command resources.

Publication Types: Review Review, Tutorial

PMID: 15379079 [PubMed - indexed for MEDLINE]



31: Mil Med. 2004 Aug;169(8):594-9.

Potential use of microarray technology for rapid identification of central nervous system pathogens.

Hanson EH, Niemeyer DM, Folio L, Agan BK, Rowley RK.

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Outbreaks of central nervous system (CNS) diseases result in significant productivity and financial losses, threatening peace and wartime readiness capabilities. To meet this threat, rapid clinical diagnostic tools for detecting and identifying CNS pathogens are needed. Current tools and techniques cannot efficiently deal with CNS pathogen diversity; they cannot provide real-time

identification of pathogen serogroups and strains, and they require days, sometimes weeks, for examination of tissue culture. Rapid and precise CNS pathogen diagnostics are needed to provide the opportunity for tailored therapeutic regimens and focused preventive efforts to decrease morbidity and mortality. Such diagnostics are available through genetic and genomic technologies, which have the potential for reducing the time required in serogroup or strain identification from 500+ hours for some viral cultures to less than 3 hours for all pathogens. In the near future, microarray diagnostics and future derivations of these technologies will change the paradigm used for outbreak investigations and will improve health care for all.

Publication Types: Case Reports

PMID: 15379069 [PubMed - indexed for MEDLINE]

32: Mil Med. 2004 Aug;169(8):580-2.

A proposal for regional chemical and biological defense among the Balkan countries.

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In terms of preventing or reducing the mass disaster caused by chemical and biological warfare agents (CBWs), establishing an efficient chemical and biological defense (CBD) system is vital. Balkan countries including Turkey, Greece, Romania, and Bulgaria are located in the "hot region," where some of the neighboring countries have had a CBW production program or do not comply with the international treaties related to the prohibition of CBWs. On the other hand, setting up the CBD is difficult and requires excessive expenditure, which causes a large economical hardship. According to the point of view of Turkish nuclear, biological, and chemical scientists, who are well experienced with CBD, the formation of a CBD system in the Balkan countries would prevent the CBW threat in this region, and in addition, would be able to make a contribution to global security.

PMID: 15379066 [PubMed - indexed for MEDLINE]

33: Mil Med. 2004 Aug;169(8):575-9.

Mass violence and early mental health intervention: a proposed application of best practice guidelines to chemical, biological, and radiological attacks.

Ritchie EC, Friedman M, Watson P, Ursano R, Wessely S, Flynn B.

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Based on past episodes, there will be psychological sequelae to chemical, biological, and radiological attacks. Some of the psychological morbidity should be able to be ameliorated through planning and appropriate early intervention. Key components of early intervention are illustrated following a hypothetical scenario of a bomb and anthrax threat near the Pentagon. Many of these components, such as monitoring clear, consistent messages about health risks, are provided by physicians or politicians, not mental health providers, but have a serious impact on the mental health of the population. We hope that this scenario and the principles of response will prove useful to planners of emergency preparedness and responders in the case of an actual attack.

PMID: 15379065 [PubMed - indexed for MEDLINE]

34: Mod Pathol. 2004 May;17(5):489-95.

Histologic and molecular diagnosis of tularemia: a potential bioterrorism agent endemic to North America.



Lamps LW, Havens JM, Sjostedt A, Page DL, Scott MA.  
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*Francisella tularensis* (FT), a zoonotic bacterium that causes tularemia, has received attention as a possible bioterrorism threat. We developed a PCR assay for use in fixed, processed tissues, which are safer to handle and allow archival testing. PCR analysis for a 211-bp fragment of the FT lipoprotein gene was performed on tissues from 16 cases of tularemia. In all, 14/15 cases with intact DNA (93%) were positive for FT by PCR. Frequent histologic findings in PCR-positive tissues included irregular microabscesses and granulomas in liver, spleen, kidney, and lymph nodes, and necrotizing pneumonia. Unusual cases featuring suppurative leptomeningitis and gastrointestinal ulcers were also seen. As this disease is endemic in North America, and has been identified as a potential bioterroristic threat, awareness of the clinicopathologic spectrum of disease and available detection methods is increasingly important. This PCR assay, the first designed for use in processed tissues, is an excellent method for diagnosis of tularemia.  
PMID: 15001997 [PubMed - indexed for MEDLINE]

35: N J Med. 2004 Sep;101(9 Suppl):59-64; quiz 64-5.  
New Jersey State Public Health Laboratory's bioterrorism response activities.  
Hom S.  
Bioterrorism Laboratory Service, New Jersey Department of Health, USA.  
PMID: 15497736 [PubMed - in process]

36: N J Med. 2004 Sep;101(9 Suppl):26-31; quiz 32-3.  
An epidemiologist's view of bioterrorism.  
Bresnitz EA, Ziskin LZ.  
Publication Types: Interview  
PMID: 15497732 [PubMed - in process]

37: N J Med. 2004 Sep;101(9 Suppl):9-16.  
Legal issues involving bioterrorism preparedness in New Jersey. An initial discourse.  
Jackson JZ, McBride AF 3rd, Robertson JA.  
Kalison, McBride, Jackson & Murphy, P.A., Warren, New Jersey, USA.  
PMID: 15497730 [PubMed - in process]

38: N J Nurse. 2004 May-Jun;34(4):16.  
Bioterrorism and the profession: if a missile or a disease outbreak strikes New Jersey tomorrow, are you fully prepared for the nursing consequences?  
Torre C.  
Publication Types: Congresses  
PMID: 15233004 [PubMed - indexed for MEDLINE]

39: Nat Biotechnol. 2004 Apr;22(4):387-91.  
Making prevention pay.  
Dove A.  
PMID: 15060549 [PubMed - indexed for MEDLINE]

40: Prehospital Disaster Med. 2004 Jan-Mar;19(1):29-36.  
Minimizing casualties in biological and chemical threats (war and terrorism): the importance of information to the public in a prevention program.  
Noy S.  
[Shabtai\\_Noy@huji.ac.il](mailto:Shabtai_Noy@huji.ac.il)  
The most effective means of defending against biological or chemical warfare, whether in war or as a result of terror, is the use of primary prevention. The main goal of such a prevention program is to minimize the human loss by reducing the number of casualties (fatalities, physical wounds, and psychological injury). A secondary objective is to prevent the widespread sense of helplessness in the general population. These two aims complement each other. The more the public is active in defending itself, rather than viewing itself as helpless,

the lesser the expected number of casualties of any kind. In order to achieve these two goals, educating the civilian population about risk factors and pointing out appropriate defensive strategies is critical. In the absence of an effective prevention program and active participation by the public, there is

a high risk for massive numbers of physical and psychological casualties. An essential ingredient of any preventive program, which ultimately may determine the success or failure of all other protective actions, is early, gradual dissemination of information and guidance to the public, so that citizens can become active participants in the program. The public needs to be given

information concerning the nature of the threat and effective methods of coping with it, should an unconventional attack occur. Lack of such adaptive behavior (such as wearing protective gear) is likely to bring about vast numbers of physical and psychological casualties. These large numbers may burden the medical, political, and public safety systems beyond their ability to manage.

Failure to provide reasonable prevention and effective interventions can lead to a destruction of the social and emotional fabric of individuals and the society. Furthermore, inadequate preparation, education, and communication can result in the development of damaging mistrust of the political and military leadership, disintegration of social and political structures, and perhaps, even risk the collapse of the democracy.

Publication Types: Review Review, Tutorial  
PMID: 15453157 [PubMed - indexed for MEDLINE]

41: Science. 2004 Oct 22;306(5696):590.

Bioterrorism and the courts. Butler appeals conviction, risking longer sentence.  
Malakoff D.

Publication Types: News  
PMID: 15498979 [PubMed - in process]

42: Stud Health Technol Inform. 2003;94:165-7.

Virtual simulated patients for bioterrorism preparedness training.

Kizakevich PN, Lux L, Duncan S, Guinn C, McCartrey ML.

RTI International, 3040 Cornwallis Road, Research Triangle Park, NC 27709, USA.

PMID: 15455883 [PubMed - indexed for MEDLINE]

43: Vaccine. 2004 Nov 15;23(1):84-90.

Preventive vaccines against bioterrorism: evaluation of efficacy and safety.

Horne AD, Clifford J, Goldenthal KL, Kleppinger C, Lachenbruch PA.

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This paper discusses the US Food and Drug Administration's approach to evaluation of vaccines in general, and vaccines against diseases of bioterrorism in particular. We summarize the scientific bases for development and approval of vaccines and then discuss specific issues regarding vaccines against disease organisms that could potentially be used as weapons of bioterrorism.

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